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The Medicare and Medicaid Programs in Rural America

A Profile of Program Beneficiaries and Health Care Providers

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Abstract

The Medicare and Medicaid programs cover a larger share of the population in nonmetropolitan than metropolitan areas because nonmetropolitan areas have relatively more elderly, disabled, and poor persons entitled to benefits. Nonmetropolitan health care providers are consequently more dependent on Medicare and Medicaid revenue than their metropolitan counterparts. The rapid growth of public expenditures on the Medicare and Medicaid programs has prompted legislative proposals to slow the growth of spending. The proposals are likely to have a greater impact on nonmetropolitan than metropolitan areas due to the geographic variations in program coverage and expenditures.

Keywords: Medicare, Medicaid, health insurance, rural health care

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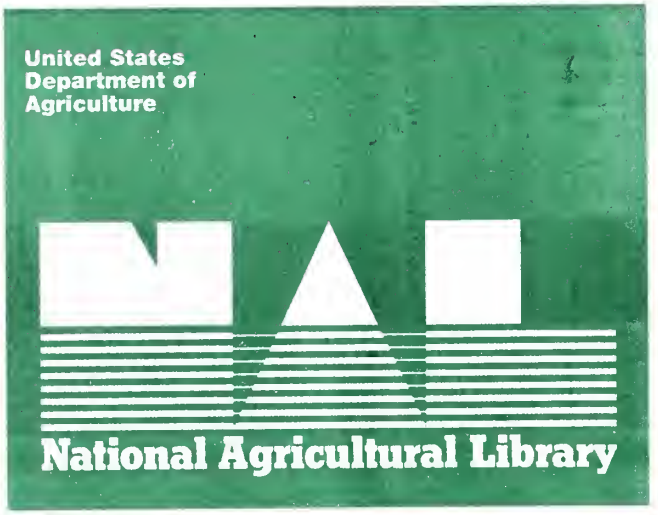

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Summary

Public expenditures on Medicare benefits for the elderly and disabled and Medicaid benefits for the poor have grown rapidly since 1980, raising concern about the impact on the Federal and State budgets. Recent legislative proposals would slow the growth of Medicare and Medicaid spending by making changes in both programs. The proposed changes are likely to have more impact on nonmetropolitan (nonmetro) than metropolitan (metro) areas because nonmetro residents and health care providers are more dependent on the Medicare and Medicaid programs than their metro counterparts.

The Federal Medicare program provides health insurance for the elderly and disabled. Medicare coverage is higher in nonmetro than metro areas because nonmetro residents are more likely to be elderly or disabled than are metro residents. Physicians and hospitals consequently receive a larger share of their revenue from Medicare patients in nonmetro than metro areas.

Legislative proposals to control Medicare spending include: (1) increasing the share of costs paid by program beneficiaries, which will have a greater impact on nonmetro beneficiaries due to their lower incomes; (2) reducing the projected growth of payments for medical services, which may disproportionately affect nonmetro health care providers more dependent on Medicare revenue; and (3) shifting more beneficiaries into managed care plans, increasing competition among providers and adversely affecting some nonmetro providers.

The Federal-State Medicaid program provides medical assistance for specific categories of the poor. Medicaid coverage is higher in nonmetro than metro areas due to the higher poverty rate in nonmetro areas. Nonmetro physicians receive a larger share of their revenue from Medicaid patients than do metro physicians, but nonmetro hospitals are less dependent on Medicaid payments than are metro hospitals.

Legislative proposals to control Medicaid spending include: (1) setting annual limits on Federal expenditures, and (2) converting Federal matching funds into block grants to give States more authority over Medicaid eligibility standards and benefits. It is difficult to predict how individual States will respond. However, changes in eligibility standards or benefits at the State level are likely to affect relatively more nonmetro than metro residents due to the higher level of Medicaid coverage in nonmetro areas.

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Introduction

Public expenditures on Medicare benefits for the elderly and disabled and Medicaid benefits for the poor have grown rapidly since 1980, both in real terms and in relation to the national economy (fig. 1). The rate of growth has accelerated since the late 1980s. The rise in spending has been due to a number of factors, including the expansion of coverage and benefits, increases in the per capita use of health services, technological change in medical care, medical price inflation in excess of general price inflation, and the growth and aging of the U.S. population (Levit et al., 1994; Prospective Payment Assessment Commission, 1995).

Concern about the impact of rising Medicare and Medicaid expenditures on the Federal and State budgets has prompted legislative proposals to slow the growth of spending by making changes in both programs. Proposals to control Medicare spending include: (1) increasing the share of costs paid by Medicare beneficiaries; (2) reducing the projected growth of payments to health care providers; and (3) enrolling more beneficiaries in managed care plans, which provide care at lower cost than traditional fee-for-service arrangements. Proposals to control Medicaid spending include: (1) setting annual limits on Federal Medicaid expenditures, and (2) converting Federal matching funds into block grants to give States more authority over Medicaid eligibility standards and benefits.

The rapid growth of public spending on health care for the elderly, disabled, and poor poses a dilemma for all Americans, including residents of both urban and rural communities. However, measures to control Medicare and Medicaid spending are likely to have a greater impact on rural communities because Medicare and Medicaid cover relatively more rural than urban residents, and represent a larger source of revenue for rural health care providers than their urban counterparts. The greater role of the Medicare and Medicaid programs in rural communities reflects other economic and demographic differences between urban and rural areas, especially the higher proportion of elderly, disabled, and poor persons in rural areas.

This paper describes the urban-rural differences in Medicare and Medicaid coverage and expenditures, and examines the potential impact of proposals to control Medicare and Medicaid spending on

rural communities. Each program is considered in turn, drawing on information from a variety of sources. The official classification of metropolitan areas by the U.S. Office of Management and Budget (OMB) is employed throughout to distinguish urban and rural areas, with urban areas defined as metropolitan counties and rural areas defined as nonmetropolitan counties.[1] "Metropolitan" and "nonmetropolitan" are abbreviated as "metro" and "nonmetro."

Although there are a number of differences in Medicare and Medicaid coverage and expenditures between metro and nonmetro areas, two important facts stand out. First, Medicare and Medicaid cover relatively more nonmetro than metro residents because nonmetro residents are more likely to be elderly, disabled, or poor (tables 1, 2). Estimates from the Current Population Survey (CPS) for the noninstitutional population indicate that nearly 27 percent of nonmetro residents were covered by one or both programs in 1993, in comparison to 23 percent of metro residents.

Second, nonmetro health care providers are generally more dependent on Medicare and Medicaid revenue than metro providers due to the higher levels of Medicare and Medicaid coverage in nonmetro areas (tables 1, 2). The Medicare and Medicaid programs together provided 50 percent of the net patient revenue received by nonmetro community hospitals in 1993, in contrast to 46 percent of metro hospital revenue.[2] The two programs also provided 49 percent of the gross practice revenue received by nonmetro physicians in 1994, in contrast to 37 percent of metro physician revenue.[3]

The differences in Medicare and Medicaid coverage and expenditures between metro and nonmetro areas have important

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[1]The 1983 OMB metropolitan classification was updated in 1993 to take account of changes in urbanization between the 1980 and 1990 censuses (Butler and Beale, 1994). The update resulted in the reclassification of 114 nonmetro counties as metro, and 13 metro counties as nonmetro. Most of the data on geographic differences in program coverage and expenditures cited in this paper are based on the 1983 OMB classification. Exceptions include data on hospital costs, Medicare reimbursement for hospitals and managed care plans, Medicare coverage of the total population, and Medicare expenditures per beneficiary, which are based on the 1993 OMB classification.

[2]Information from the 1993 Annual Survey of Hospitals provided by the American Hospital Association.

[3]Information from a 1994 survey of physicians provided by the American Medical Association.

implications for national health policy. Measures to control Medicare and Medicaid expenditures will inevitably have more impact on nonmetro areas, where Medicare and Medicaid cover a higher proportion of the population and provide a larger share of physician and hospital revenue. Changes in the Medicare and Medicaid programs that do not take these differences into account may impose a disproportionate share of the burden of reduced expenditures on nonmetro residents and health care providers.

The Medicare Program

Medicare is a Federal health insurance program covering most of the elderly aged 65 or older and certain disabled persons under age 65. The program is divided into two parts. All eligible persons are entitled to Part A (Hospital Insurance) covering inpatient hospital, nursing home, hospice, and home health care, and may also enroll voluntarily in Part B (Supplementary Medical Insurance) covering physician services, medical supplies, and other outpatient treatment. There were 37 million Medicare beneficiaries in 1994, including 33 million elderly and 4 million disabled persons (Prospective Payment Assessment Commission, 1995).

Medicare Part A is financed through a trust fund supported by Social Security taxes. The Medicare Board of Trustees has projected that the trust fund will be exhausted by 2002 due to the growing imbalance between tax receipts and expenditures. Medicare Part B is financed by general Federal revenues and monthly premiums paid by beneficiaries. Under current legislation, the premium equals 25 percent of the average cost of Part B benefits. Beneficiaries are also responsible for annual deductibles and copayments. Overall, beneficiaries were liable for 27 percent of the total cost of medical services covered by Medicare in 1994 (Prospective Payment Assessment Commission, 1995).

Medicare expenditures on health care are unequally distributed among beneficiaries due to the uneven incidence of health problems. The Health Care Financing Administration (HCFA) found that the 10 percent of beneficiaries with the highest medical costs accounted for 70 percent of total expenditures in 1993.

Rural Beneficiaries

The Medicare program covers relatively more nonmetro than metro residents because nonmetro residents are more likely to be elderly or disabled (table 1). Medicare enrollment data for the total population (including persons in nursing homes and other institutions) indicate that 16 percent of nonmetro residents and 13 percent of metro residents were Medicare beneficiaries in 1992

(Rural Policy Research Institute, 1995a).

The Medicare coverage rate was highest in nonmetro areas of the Great Plains and Midwest with high proportions of elderly persons (fig. 2). Some metro areas also had high coverage rates, notably in Florida and Pennsylvania.

CPS estimates for the noninstitutional population (excluding persons in institutions and military personnel) indicate that Medicare coverage has risen slightly since the late 1980's in nonmetro areas, while remaining constant in metro areas (fig. 3). The rise in nonmetro areas was concentrated among persons under age 65, and was apparently due to an increase in disability.

The average Medicare expenditure per beneficiary was 19 percent lower in nonmetro areas ($3,191) than metro areas ($3,937) in 1992 (Rural Policy Research Institute, 1995a). The difference in expenditures was attributable to the lower Medicare reimbursement rates for health care providers in nonmetro areas, and perhaps also lower use of medical services by nonmetro than metro beneficiaries (see below).

Although the Medicare program spent less on nonmetro than metro beneficiaries, total Medicare expenditures were greater in relation to total personal income in nonmetro areas (3 percent) than metro areas (2 percent) in 1992 (Rural Policy Research Institute, 1995a). The greater role of Medicare expenditures in the nonmetro economy reflected the higher Medicare coverage rate and lower incomes in nonmetro areas.

The Elderly. Nearly 15 percent of nonmetro residents and 12 percent of metro residents were aged 65 or older and consequently eligible for Medicare in 1990 (U.S. Bureau of the Census, 1993). Although all of the elderly are eligible for Medicare, persons not entitled to Social Security benefits must pay the full cost of Medicare benefits and may decide to forego coverage. CPS estimates indicate that Medicare covered slightly more of the nonmetro elderly (97 percent) than metro elderly (95 percent) in 1993, possibly because fewer of the metro elderly were eligible for Social Security benefits.

The nonmetro elderly tend to be in poorer health than the metro elderly. A 1992 survey of the noninstitutional population found that relatively more of the nonmetro elderly (42 percent) than metro elderly (38 percent) were physically limited by chronic health conditions.[4] A higher proportion of the nonmetro elderly

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[4]Calculated by ERS using data from the 1992 National Health Interview Survey conducted by the National Center for Health Statistics, U.S. Department of Health and Human Services.

(32 percent) than metro elderly (28 percent) also assessed their own health as only fair or poor.

The Disabled. Health disabilities are more common in nonmetro than metro areas. Noninstitutionalized persons aged 16-64 were more likely to have a disability that prevented them from working in nonmetro areas (6 percent) than metro areas (4 percent) in 1990 (U.S. Bureau of the Census, 1993). However, many persons reporting disabilities did not meet the Social Security Administration definition of disability determining eligibility for Medicare.

Persons who qualified for Medicare due to disability represented a higher proportion of beneficiaries in nonmetro areas (11 percent) than metro areas (9 percent) in 1992 (Rural Policy Research Institute, 1995a). Disabled beneficiaries had more serious health problems than elderly beneficiaries and incurred 17 percent higher Medicare costs on average (Committee on Ways and Means, 1994).

Access to Health Care. There is some evidence that nonmetro Medicare beneficiaries use less health care than metro beneficiaries. Medicare claims data indicate that nonmetro beneficiaries received 18 percent fewer physician services than metro beneficiaries in 1990, after adjusting for differences in service intensity and the demographic characteristics of beneficiaries (Miller et al., 1995).

The lower use of health care by nonmetro beneficiaries is due at least in part to their poorer access to care. A 1992 HCFA survey found that slightly more nonmetro beneficiaries (13 percent) than metro beneficiaries (11 percent) had a health problem needing medical attention but had not seen a physician during the year (Physician Payment Review Commission, 1994). Nonmetro beneficiaries were also less likely to be very satisfied with the availability of care (21 percent) than metro beneficiaries (24 percent).

One reason why nonmetro beneficiaries have poorer access to health care may be the smaller supply of health personnel and facilities in nonmetro areas. Nonmetro areas had only 51 primary care physicians per 100,000 residents in 1992, in contrast to 92 in metro areas.[5] The average community hospital was also much smaller in nonmetro areas (84 beds) than metro areas (242 beds), requiring nonmetro beneficiaries to travel further than metro

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[5]Calculated by ERS using physician and population data from the Area Resource File assembled by the Bureau of Health Professions, U.S. Department of Health and Human Services.

beneficiaries to obtain the specialized medical services offered only by large hospitals (American Hospital Association, 1994).

Another reason why nonmetro Medicare beneficiaries have poorer access to health care may be the lower incomes in nonmetro areas. CPS estimates indicate that the median income of beneficiaries was 10 percent lower in nonmetro areas ($15,368) than metro areas ($17,084) in 1993. Nearly 18 percent of nonmetro beneficiaries were below the poverty level, in comparison to 12 percent of metro beneficiaries. Nonmetro beneficiaries were consequently less able than metro beneficiaries to afford the out-of-pocket costs of Medicare coverage, which averaged $1,205 per beneficary in 1994 (Prospective Payment Assessment Commission, 1995).

Rural Health Care Providers

The Medicare program covers medical services offered by a wide variety of health care providers. Payments to physicians and hospitals accounted for more than three-fourths of total Medicare expenditures in 1993 (Committee on Ways and Means, 1994).

Physician Reimbursement. Medicare payments for physician services are determined by the Medicare Fee Schedule (MFS). Under the MFS, payments are adjusted for geographic variations in practice costs, which are generally lower in nonmetro than metro areas. Nonmetro physicians consequently receive lower payments for the same services than metro physicians. The payment differential in favor of metro physicians has diminished since the MFS was introduced in 1992 because primary care services are reimbursed at a relatively higher rate than under the former payment system, and nonmetro physicians provide more primary care than metro physicians (Physician Payment Review Commission, 1994).

Physicians who provide services to Medicare beneficiaries in Health Personnel Shortage Areas (HPSA's) receive an additional 10 percent bonus payment intended to attract and retain physicians in underserved areas. HPSA's are designated by the U.S. Department of Health and Human Services, and must meet certain criteria including fewer than 29 primary care physicians per 100,000 residents. About 22 percent of nonmetro beneficiaries and 5 percent of metro beneficiaries lived in HPSA's in 1992 (Physician Payment Review Commission, 1994).

Despite the lower reimbursement rates for nonmetro physicians, Medicare payments accounted for a higher proportion of physician gross practice revenue in nonmetro areas (33 percent) than metro

areas (27 percent) in 1994.[6] The difference in revenue reflects the higher level of Medicare coverage in nonmetro areas.

Hospital Reimbursement. Medicare payments for inpatient hospital care are determined by the Prospective Payment System (PPS). Under the PPS, payments are higher for hospitals in large metro areas than elsewhere, and are further adjusted for geographic variations in hospital wage rates, which are lowest in nonmetro areas. As a result, nonmetro hospitals receive lower payments than metro hospitals for the same services. The payment differential in favor of metro hospitals has decreased during the past decade due to several changes in reimbursement policy designed to benefit nonmetro hospitals (Prospective Payment Assessment Commission, 1995).

Although nonmetro hospitals receive lower Medicare payments than metro hospitals, nonmetro hospitals are more dependent on Medicare revenue due to the higher level of Medicare coverage in nonmetro areas. Medicare payments accounted for 39 percent of the net patient revenue received by nonmetro community hospitals in 1993, in contrast to 33 percent for metro hospitals.[7]

Community hospitals are most dependent on Medicare payments in areas with high Medicare coverage rates, particularly in nonmetro areas of the Great Plains and Midwest (fig. 4). About 9 percent of nonmetro residents and 2 percent of metro residents lived in areas where Medicare provided 45 percent or more of hospital net patient revenue.[8]

The PPS provides extra payments for hospitals with unusually high expenses, including "disproportionate share hospitals" with many low-income patients, "sole community hospitals" serving nonmetro areas without other hospitals, and "rural referral hospitals" with large service areas. In 1993, 22 percent of nonmetro hospitals were disproportionate share hospitals, 27 percent were sole community hospitals, and 9 percent were rural referral hospitals (Prospective Payment Assessment Commission, 1995).

Despite the extra payments for hospitals with high expenses, total Medicare payments to hospitals were estimated to be only 89 percent of the costs of treating Medicare patients in 1993

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[6]Information from a 1994 survey of physicians provided by the American Medical Association.

[7]Information from the 1993 Annual Survey of Hospitals provided by the American Hospital Association.

[8]Calculated by ERS using data from the 1993 Annual Survey of Hospitals provided by the American Hospital Association.

(Prospective Payment Assessment Commission, 1995). Hospitals responded by raising charges for private patients, shifting the unreimbursed costs of Medicare patients to other payers. Nonmetro hospitals engaged in more cost shifting than metro hospitals because losses from Medicare patients represented a larger share of total expenses for nonmetro hospitals (5 percent) than metro hospitals (4 percent). As a result, charges for private patients were 137 percent of costs in nonmetro hospitals, in contrast to 129 percent of costs in metro hospitals (Prospective Payment Assessment Commission, 1995).

The greater losses incurred by nonmetro hospitals from Medicare patients have raised concerns about the financial impact of the Medicare program on nonmetro hospitals. The financial condition of hospitals is measured by the total margin, the difference between revenue and expenses. In 1994, nearly 25 percent of nonmetro hospitals had negative total margins and lost money during the year, in comparison to 23 percent of metro hospitals (Prospective Payment Assessment Commission, 1995).

Managed Care Plans. The Medicare program permits most beneficiaries to enroll in managed care plans meeting designated criteria. Managed care plans provide care at lower cost than traditional fee-for-service arrangements by taking advantage of economies of scale, negotiating group discounts from health care providers, and reducing hospitalization rates. Plans have expanded rapidly in recent years, but remain less widespread in nonmetro areas. Only 61 percent of nonmetro counties were served by one or more plans in 1993, in comparison to 90 percent of metro counties (Ricketts, 1995).

About three-fourths of Medicare beneficiaries lived in areas served by one or more approved managed care plans (Physician Payment Review Commission and Prospective Payment Assessment Commission 1995). However, only 2 percent of nonmetro beneficiaries and 9 percent of metro beneficiaries were enrolled in plans in 1993 (Physician Payment Review Commission, 1995).

Most Medicare plan enrollees belong to "risk contract" plans that provide care for a fixed monthly payment per enrollee, risking financial losses if the average cost of care per enrollee exceeds the fixed payment. The payment rate is based on the adjusted average per capita cost (AAPCC) of Medicare fee-for-service care in each county. The average monthly AAPCC was 25 percent lower in nonmetro areas ($323) than metro areas ($428) in 1995, discouraging plans from expanding in nonmetro areas (Physician Payment Review Commission and Prospective Payment Assessment Commission, 1995). Nonmetro health care providers also tend to be more reluctant to participate in risk contract plans than metro providers because they often have fewer patients and are less able to absorb unexpected losses.

Impact of Program Changes on Rural Communities

Legislative proposals to slow the future growth of Federal Medicare expenditures include: (1) increasing the share of costs paid by Medicare beneficiaries; (2) reducing the projected growth of payments to health care providers; and (3) enrolling more beneficiaries in managed care plans.

Cost Sharing. Proposals to increase the share of Medicare costs paid by beneficiaries include raising the Part B premium for all beneficiaries, and phasing out the Federal subsidy of Part B benefits for high-income beneficiaries. Increases in cost sharing for all beneficiaries will have a greater financial impact on nonmetro beneficiaries due to their lower incomes. In contrast, increases in cost sharing limited to high-income beneficiaries will probably affect relatively fewer nonmetro than metro beneficiaries, depending on the income level chosen to phase in higher cost sharing.

Proponents of greater cost sharing note that beneficiaries currently pay only 27 percent of the cost of medical services covered by Medicare, and will have more opportunities to limit their out-of-pocket costs by enrolling in managed care plans. Critics contend that increased cost sharing will be burdensome for low-income beneficiaries, particularly if States reduce or eliminate the current Medicaid subsidy for the out-of-pocket costs of Medicare coverage for poor beneficiaries (see below).

Reimbursement. Proposals to reduce the projected growth of Medicare payments to health care providers include separate annual limits on total payments for managed care plans and fee-for-service providers, and provisions to cut payments for fee-for-service providers if the limits are exceeded. The slower growth of payments may disproportionately affect nonmetro providers, who are more dependent on Medicare revenue than their metro counterparts. The precise impact on nonmetro providers will depend on how the payment reductions are allocated among different categories of providers (Rural Policy Research Institute; 1995b, 1995c).

Proponents of reductions in the growth of Medicare payments contend that the rapid growth of medical costs will slow as more beneficiaries enroll in managed care plans, permitting smaller increases in payments (see below). Critics fear that payments may fall further below the costs of treating Medicare patients, forcing providers to shift even more of the costs to private patients. Increased cost shifting might result in turn in higher private health insurance premiums and a rise in the number of uninsured persons as more families become unable to afford

private insurance.

Reductions in the growth of Medicare payments might have an even greater impact on nonmetro than metro areas. Nonmetro health care providers may be less able to shift additional unreimbursed costs for Medicare patients to private patients than metro providers because private patients represent a smaller share of the patient population and already pay relatively more for hospital care in nonmetro areas. Nonmetro families may also be less able to afford increases in health insurance premiums driven by increased cost shifting than metro families because nonmetro families have lower incomes, and are less likely to have relatively inexpensive employer-provided coverage.

Managed Care. Proposals to increase Medicare managed care enrollment anticipate that Medicare expenditures will be reduced by promoting price competition among managed care plans, shifting beneficiaries out of more costly fee-for-service arrangements, and making beneficiaries more sensitive to the cost of medical services. Managed care enrollment will be increased by providing a wider choice of plans to encourage beneficiaries to join some kind of plan. Measures to increase the availability of plans include raising payment rates for managed care, relaxing antitrust restrictions to allow providers to establish plans even in areas with few providers, and establishing "Medical Savings Accounts" (MSA's) as another option for beneficiaries. Beneficiaries who choose MSA's will be able to control their own use of medical services and retain part of any cost savings, increasing competitive pressures on plans.

Increases in payment rates for managed care may have less initial impact on the availability of plans in nonmetro than metro areas because there are fewer established plans in nonmetro areas. However, the relaxation of antitrust restrictions is likely to encourage the formation of new plans in nonmetro areas that might not otherwise be feasible markets for managed care (Rural Policy Research Institute; 1995b, 1995c). MSA's may also prove more popular among nonmetro than metro Medicare beneficiaries because nonmetro residents tend to be more self-reliant and wary of bureaucratic controls than metro residents.

Proponents of the various measures to increase Medicare managed care enrollment expect that higher enrollment will result in substantial cost savings. Critics note that managed care plans will have financial incentives to selectively enroll healthy beneficiaries because of the high medical costs incurred by beneficiaries with serious health problems. As a result, high-cost beneficiaries may become increasingly concentrated in the fee-for-service sector, triggering cuts in payments for fee-for-service providers that might adversely affect care for their patients. Critics also suggest that MSA's will transfer public

funds to healthy beneficiaries that should be spent on medical services for the ill and disabled.

Critics have raised a number of other concerns about the impact of increased Medicare managed care enrollment on nonmetro areas. Managed care plans that expand into nonmetro areas might take control of local hospitals, excluding residents from decisions about important community institutions. Alternatively, plans might require nonmetro enrollees to use better equipped metro hospitals rather than invest in nonmetro facilities, depriving nonmetro hospitals of patients and increasing travel times to hospitals for nonmetro residents. Some plans that enter nonmetro areas and disrupt local health care systems might subsequently withdraw if the market proves unprofitable, leaving affected communities with less access to care than before (Rural Policy Research Institute; 1995b, 1995c).

Critics also note that increasing price competition among health care providers for Medicare managed care patients might force nonmetro hospitals with small patient volumes or negative total margins to close due to their inability to discount charges. Conversely, some nonmetro areas may have too few providers to provoke price competition, discouraging plans from entering the market and limiting the availability of plans. Finally, the rising demand by plans for primary care physicians employed as "gatekeepers" to control access to care might worsen the geographic imbalance in the physician supply if plans pay higher salaries in metro areas, drawing physicians away from nonmetro locations (Rural Policy Research Institute; 1995b, 1995c).

The Medicaid Program

Medicaid is a combined Federal-State program to provide medical assistance for specific categories of the poor, including the elderly, blind, disabled, families with dependent children, and pregnant women. The program is administered by individual States, with the Federal Government paying 50-79 percent of the cost under a matching formula based on State per capita income. In 1993, 38 million persons were enrolled in Medicaid for at least 1 month during the year, and 33 million persons received covered medical services. About 27 percent of service recipients were elderly, blind, or disabled; 50 percent were dependent children; and 23 percent were adult members of families with dependent children (Prospective Payment Assessment Commission, 1995).

Under current legislation, States are required to provide Medicaid coverage for persons receiving Aid to Families with Dependent Children (AFDC) payments, most Supplemental Security Income (SSI) recipients, and pregnant women, children, and Medicare beneficiaries with income and assets below minimum

standards. States may elect to cover additional categories of persons, notably children not meeting the AFDC definition of dependent child (50 States), pregnant women and infants above the minimum income standard (34 States), and medically needy and institutionalized persons above the minimum income and assets standards (35 States) (Committee on Ways and Means, 1994; Congressional Research Service, 1993).

States must provide specific benefits for most Medicaid enrollees, including inpatient hospital and nursing home care, home health care, physician services, and certain other medical services. States may also provide any of 35 optional services for some or all enrollees, including prescribed drugs (50 States), dental care (44 States), and emergency hospital services (40 States) (Congressional Research Service, 1993).

There are large variations in Medicaid expenditures per recipient between States, reflecting differences in medical benefits, reimbursement rates for health care providers, the health status of enrollee populations, and other factors. In 1992, average expenditures per recipient ranged from $520 in Arizona to $5,975 in New York (Committee on Ways and Means, 1994).

Elderly, blind, and disabled Medicaid recipients tend to be in poorer health than other recipients, and accounted for 67 percent of total Medicaid expenditures in 1993. Dependent children and adult members of their families accounted for the remaining 33 percent of expenditures (Prospective Payment Assessment Commission, 1995).

Rural Beneficiaries

The Medicaid program covers a higher proportion of nonmetro than metro residents due to the higher poverty rate in nonmetro areas (table 2). CPS estimates for the noninstitutional population indicate that 13 percent of nonmetro residents and 12 percent of metro residents were Medicaid enrollees in 1993. Comparable information about Medicaid coverage of the institutional population was unavailable.

Medicaid coverage of the noninstitutional population has grown rapidly since 1989 in both metro and nonmetro areas (fig. 5). The increase was due to a rise in the poverty rate, as well as the mandated expansion of eligibility for Medicaid benefits. The poverty rate rose nearly 2 percent in nonmetro areas and 3 percent in metro areas between 1989 and 1993, increasing the number of AFDC recipients automatically entitled to Medicaid

benefits.[9] During the same period, the Federal Government extended Medicaid coverage to several additional categories of persons, including pregnant women and children aged 0-5 below 133 percent of the poverty level, children aged 6-9 below 100 percent of the poverty level, and Medicare beneficiaries below 110 percent of the poverty level.

The Poor. CPS estimates indicate that 18 percent of nonmetro residents and 15 percent of metro residents fell below the poverty level in 1993. However, Medicaid covered only a minority of the poor, including 45 percent of the nonmetro poor and 49 percent of the metro poor. The lower level of coverage among the nonmetro poor was due in part to differences in family structure and employment that excluded relatively more of the nonmetro poor from the AFDC program and automatic eligibility for Medicaid benefits.

The lower level of Medicaid coverage among the nonmetro than metro poor was also related to the disproportionate concentration of the nonmetro poor in States with low maximum-income limits for AFDC program participation. About 83 percent of the nonmetro poor lived in States where the maximum income limit for a three-person family was below the poverty level in 1994, in comparison to 72 percent of the metro poor.[10]

Nursing Home Residents. Nearly 1.6 million Medicaid enrollees received nursing home care during 1992, most of them elderly (Congressional Research Service 1993). Elderly persons were more likely to be nursing home residents in nonmetro areas (6 percent) than metro areas (5 percent) in 1990 (U.S. Bureau of the Census, 1993). The difference may reflect the greater supply of nursing home beds in nonmetro areas, and perhaps also more limited access to home health care services.

Medicare Beneficiaries. Under current legislation, the Medicaid program pays part or all of the out-of-pocket costs of Medicare coverage for "Qualified Medicare Beneficiaries" (QMB's) with incomes below 120 percent (formerly 110 percent) of the poverty level and assets below minimum standards. Relatively more nonmetro than metro beneficiaries are eligible for QMB benefits

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[9]Calculated by ERS using data from the March 1990 and March 1994 CPS.

[10]Calculated by ERS using data on the distribution of the poor by State in 1990 (U.S. Bureau of the Census, 1993), and the maximum income limit for AFDC program participation for a family of three in 1994 (Committee on Ways and Means, 1994).

due to the higher poverty rate among nonmetro beneficiaries. Some eligible beneficiaries are unaware of the availability of QMB benefits, which are provided only if beneficiaries apply through their State Medicaid program (Congressional Research Service, 1993).

Access to Health Care. Many health care providers are unwilling to accept Medicaid patients because Medicaid pays less for the same services than Medicare in most States (see below). The low level of provider participation in the Medicaid program has prompted concern about whether Medicaid enrollees have adequate access to care. Studies have found that Medicaid enrollees visit physicians as often as other insured persons and are more likely to receive hospital care, but are less likely to receive some types of preventive care or expensive surgical procedures (Congressional Research Service, 1993). Information about whether utilization differed between metro and nonmetro enrollees was unavailable.

Rural Health Care Providers

The Medicaid program covers medical services offered by many types of health care providers. Physician services and inpatient hospital care accounted for 32 percent of total Medicaid expenditures in 1992. Payments to nursing homes and facilities for the mentally retarded accounted for another 35 percent of expenditures, reflecting the high cost of long-term care (Committee on Ways and Means, 1994). States have considerable freedom to determine reimbursement rates for providers, and there are large variations in the rates between States.

Physician Reimbursement. Medicaid fees for physician services are generally lower than Medicare fees for the same services. Medicaid fees averaged only 73 percent of Medicare fees in 1993, and tended to be lowest in urban States (Physician Payment Review Commission, 1994). As a result, 80 percent of the nonmetro poor and 91 percent of the metro poor lived in States where Medicaid fees were lower than Medicare fees.[11]

Physicians derived a larger share of their gross practice revenue from Medicaid patients in nonmetro areas (16 percent) than metro

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[11]Calculated by ERS using data on the distribution of the poor by State in 1990 (U.S. Bureau of the Census, 1993), and the ratio between average Medicaid and Medicare physician fees in 1993 (Physician Payment Review Commission, 1994).

areas (11 percent) in 1994.[12] The difference reflected the higher level of Medicaid coverage in nonmetro areas, and perhaps also the relatively lower Medicaid fees in urban States.

Hospital Reimbursement. Medicaid payments for inpatient hospital care were equal to only 93 percent of the costs of treating Medicaid patients in 1993. Hospitals responded by shifting the unreimbursed costs of Medicaid patients to private patients. Losses from Medicaid patients represented about 1 percent of total hospital costs for both metro and nonmetro hospitals (Prospective Payment Assessment Commission, 1995).

Medicaid payments accounted for a smaller share of net patient revenue for community hospitals in nonmetro areas (11 percent) than metro areas (13 percent) in 1993, in contrast to the pattern among physicians.[13] The smaller share of Medicaid revenue in nonmetro areas apparently reflects geographic variations in the use of hospital services by Medicaid enrollees.

Community hospitals were most dependent on Medicaid revenue in areas with high poverty rates, including nonmetro areas of the South and northern New England, as well as many metro areas (fig. 6). More than 16 percent of nonmetro residents and 21 percent of metro residents live in areas where Medicaid provides 15 percent or more of hospital net patient revenue.[14]

Managed Care Programs. An increasing number of States have begun shifting Medicaid enrollees into managed care programs to control Medicaid expenditures. By 1994, 44 States had some type of managed care program covering nearly 25 percent of Medicaid enrollees, primarily AFDC recipients (Prospective Payment Assessment Commission, 1995). There are considerable differences in the design and scope of programs between States. Some States provide enrollees with a choice of managed care plans, while others assign enrollees to a personal primary care physician. The shift to managed care has been too recent to determine whether metro and nonmetro enrollees have been equally affected.

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[12]Information from a 1994 survey of physicians provided by the American Medical Association.

[13]Information from the 1993 Annual Survey of Hospitals provided by the American Hospital Association.

[14]Calculated by ERS using data from the 1993 Annual Survey of Hospitals provided by the American Hospital Association.

Impact of Program Changes on Rural Communities

Legislative proposals to slow the growth of Federal and State Medicaid expenditures initially included: (1) setting annual limits on Federal Medicaid spending, and (2) converting Federal matching funds into block grants to allow States to determine Medicaid eligibility standards and benefits. State governors subsequently proposed that some categories of the poor remain automatically eligible for Medicaid coverage, including the elderly, pregnant women, and children under age 13.

Limits on Federal Expenditures. The proposed annual limits on Federal Medicaid expenditures will reduce the projected growth of Federal spending. Other proposed changes in the formula for allocating Federal matching funds among States will affect the share of funds received by individual States. The impact of the changes in Federal spending might vary considerably between States, depending on whether States respond by increasing their own Medicaid spending or using the new authority provided by block grants to alter eligibility standards or benefits (see below). Within each State, however, the impact is likely to be greater in nonmetro areas because Medicaid covers relatively more nonmetro than metro residents.

Proponents of annual limits on Federal Medicaid expenditures note that the growth of Federal spending is currently unrestrained. They argue that States can cope by shifting more Medicaid enrollees into managed care programs. Critics contend that most States will be unable to increase their own Medicaid spending to compensate for the reduction in Federal funds, and might be compelled to restrict Medicaid eligibility, reduce benefits, or cut reimbursement rates, as many did during earlier periods of spending constraints. Cuts in Medicaid reimbursement rates could force health care providers to shift additional unreimbursed costs for Medicaid patients to private patients, resulting in the same undesirable effects on private health insurance coverage anticipated in the case of reductions in Medicare payments. Critics also suggest that fixed limits on Federal Medicaid expenditures may prevent the Federal and State governments from responding rapidly to unexpected increases in the need for medical services during economic recessions or health emergencies.

Block Grants. Legislative proposals to convert Federal Medicaid matching funds into block grants will give States more authority to determine Medicaid eligibility standards and benefits, increasing State control over Medicaid expenditures. It is difficult to predict how individual States might use the new authority provided by block grants. However, States are unlikely to expand eligible populations or increase medical benefits in

view of the current national trend to limit public spending. The increase in State control of the Medicaid program will affect relatively more nonmetro than metro residents due to the higher level of Medicaid coverage in nonmetro areas.

Proponents of Medicaid block grants contend that State governments are more informed about local health care needs than is the Federal Government, and better able to develop cost-effective methods of providing medical services for the poor. Critics fear that the poor might lose their entitlement to health care if States use their new authority to restrict eligibility or cut medical benefits to reduce costs. As a result, some vulnerable groups might experience a decline in health status. Critics also worry that Medicaid spending priorities will be determined by State political interests rather than health concerns, and suggest that it will become more difficult for the Federal Government to monitor the use of Federal funds as States modify their Medicaid programs.

References

American Hospital Association. 1994. *Hospital Statistics: 1994-95 Edition*. Chicago, IL: American Hospital Association.

Butler, M.A., and C. Beale. 1994. "Rural-Urban Continuum Codes for Metro and Nonmetro Counties, 1993." U.S. Department of Agriculture, Economic Research Service. Staff Report No. AGES 9425.

Committee on Ways and Means, U.S. House of Representatives. 1994. *Overview of Entitlement Programs (1994 Green Book): Background Material and Data on Programs Within the Jurisdiction of the Committee on Ways and Means*. Washington, DC: U.S. Government Printing Office.

Congressional Research Service. 1993. *Medicaid Source Book: Background Data and Analysis (A 1993 Update)*. Washington, DC: U.S. Government Printing Office.

Miller, M.E., J. Holahan, and W.P. Welch. 1995. "Geographic Variations in Physician Service Utilization." *Medical Care Research and Review* 52:2, pp. 252-78.

Levit, K.R., C.A. Cowan, H.C. Lazenby, P.A. McDonell, A.L. Sensenig, J.M. Stiller, and D.K. Won. 1994. "National Health Spending Trends, 1960-93." *Health Affairs* 13:5, pp. 14-31.

Physician Payment Review Commission. 1994. *Annual Report to Congress, 1994*. Washington, DC.

Physician Payment Review Commission and Prospective Payment Assessment Commission. 1995. *Joint Report to the Congress on Medicare Managed Care*. Washington, DC.

Prospective Payment Assessment Commission. 1995. *Medicare and the American Health Care System: Report to Congress, June 1995*. Washington, DC.

Ricketts, T. C. 1995. "Managed Care in Rural America." Unpublished conference paper. Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill.

Rural Policy Research Institute. 1995a. *Nonmetropolitan and Metropolitan Medicare Enrollments and Payments*. RUPRI Data Report P95-7. Columbia, MO.

Rural Policy Research Institute. 1995b. *Rural Impacts of Medicare Policy Changes: Questions and Analysis With Reference to H.R. 2491*. Columbia, MO.

Rural Policy Research Institute. 1995c. *The Rural Perspective on Potential Changes in Medicare Policies*. Columbia, MO.

U.S. Bureau of the Census. 1993. *1990 Census of Population: Social and Economic Characteristics, United States*. Volume CP-2-1. Washington, DC: U.S. Government Printing Office.

Table 1: The Medicare Program in Metro and Nonmetro Areas

	Metro Areas	Nonmetro Areas
Eligibility		
Proportion of **elderly persons** aged 65 or older in total population, 1990 (percent)	11.9	14.7
Proportion of **disabled persons** unable to work in noninstitutional population aged 16-64, 1990 (percent)	3.8	5.6
Program Beneficiaries		
Proportion of **Medicare beneficiaries** in total population, 1992 (percent)	12.7	16.2
Proportion of nonelderly **disabled persons** among Medicare beneficiaries, 1992 (percent)	9.4	10.7
Median income of Medicare beneficiaries, 1993	$17,084	$15,368
Proportion **below poverty level** among Medicare beneficiaries, 1992 (percent)	12.3	17.7
Expenditures		
Average **Medicare expenditure per beneficiary**, 1992	$3,937	$3,191
Proportion of **physician gross practice revenue** from Medicare, 1994 (percent)	26.7	33.1
Proportion of **community hospital net patient revenue** from Medicare, 1993 (percent)	33.5	38.8

Sources: See text.

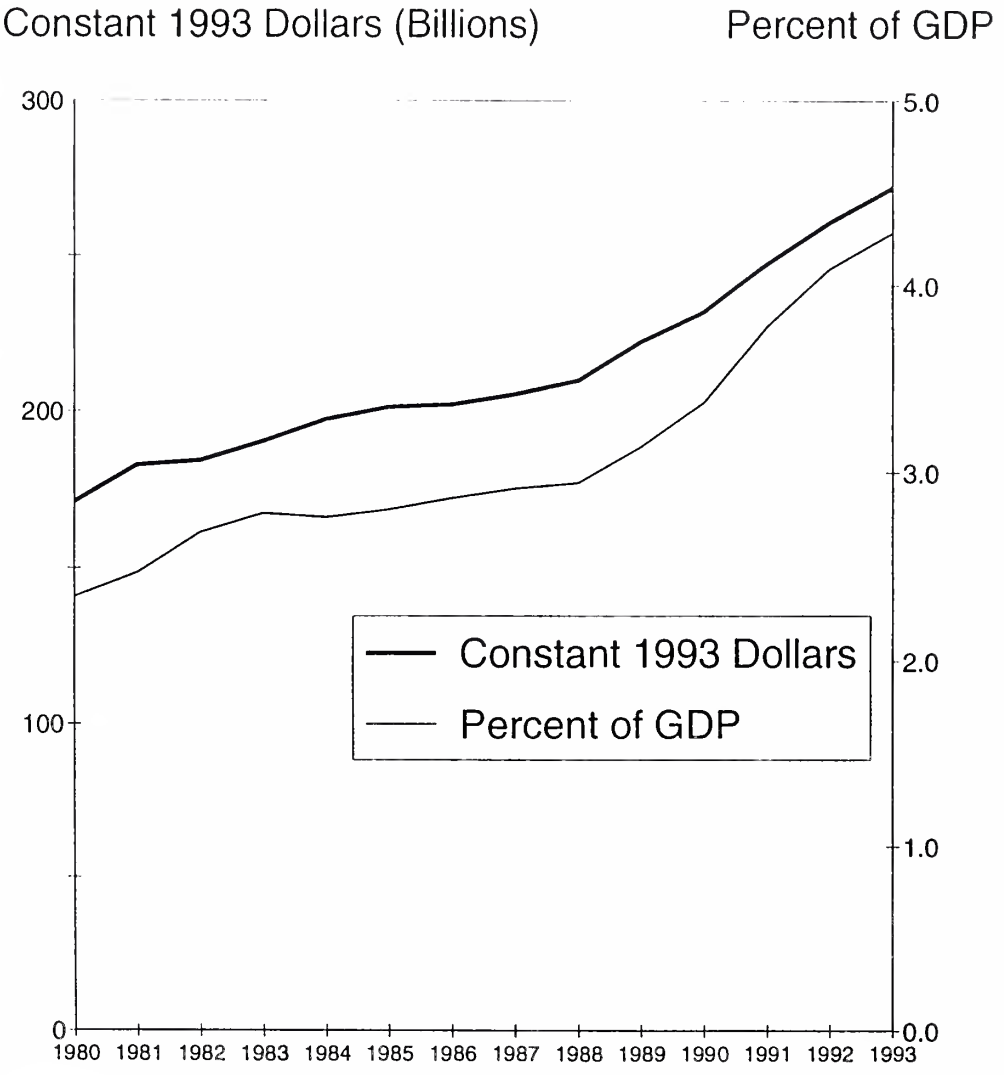
Table 2: The Medicaid Program in Metro and Nonmetro Areas

	Metro Areas	Nonmetro Areas
Eligibility		
Proportion of persons below poverty level in noninstitutional population, 1993 (percent)	14.8	17.5
Program Enrollees		
Proportion of Medicaid enrollees in noninstitutional population, 1993 (percent)	12.1	13.0
Proportion of persons below poverty level enrolled in Medicaid, 1993 (percent)	48.8	45.1
Expenditures		
Proportion of physician gross practice revenue from Medicaid, 1994 (percent)	10.5	16.1
Proportion of community hospital net patient revenue from Medicaid, 1993 (percent)	12.9	11.4

Sources: See text.

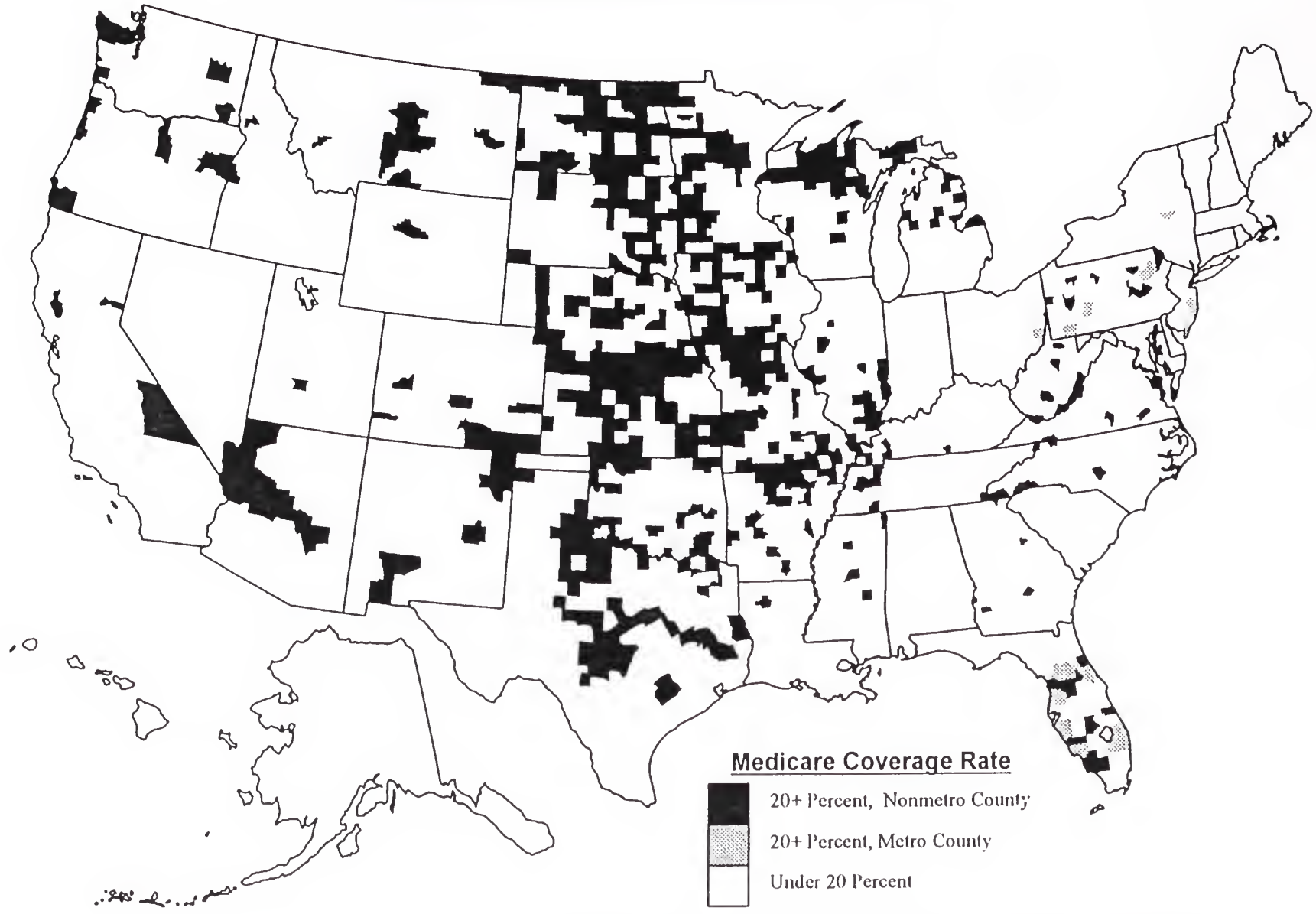
Figure 1

Federal and State Medicare and Medicaid Expenditures



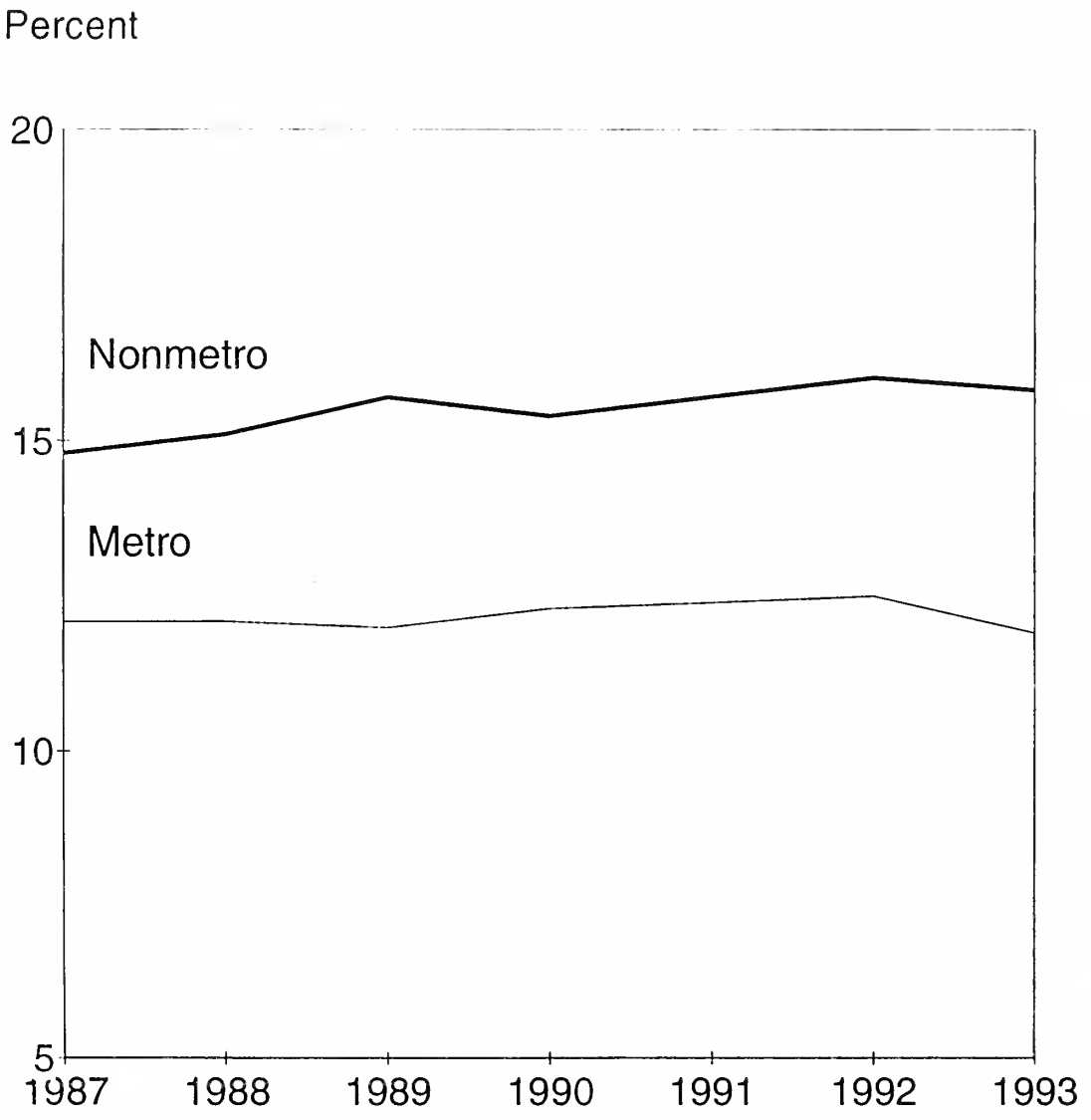
Source: Calculated by ERS from Health Care Financing Administration data.

Figure 2: Counties Where Medicare Covered 20 Percent or More of the Population, 1990



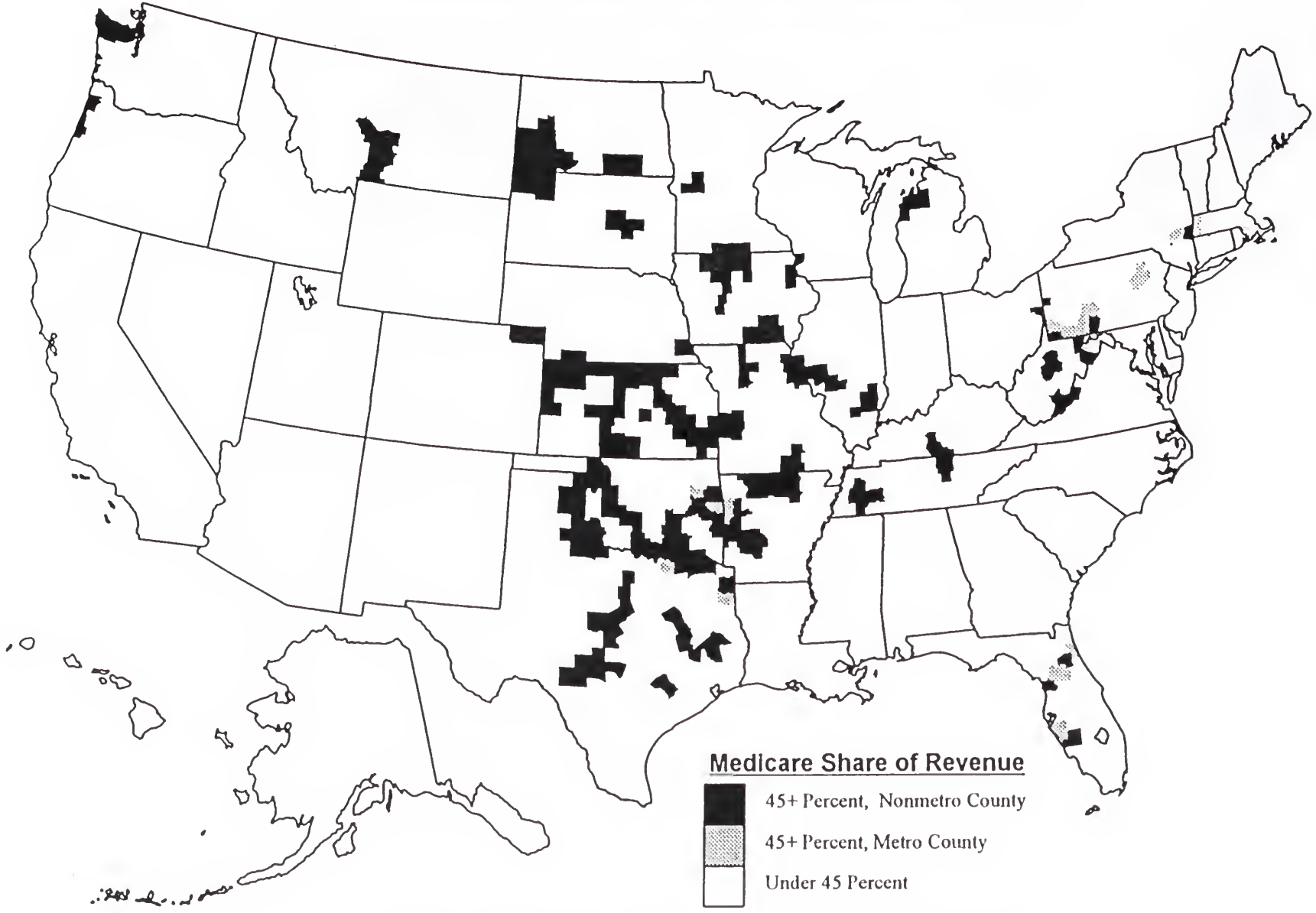
Source: Calculated by ERS from Area Resource File data.

Persons with Medicare Coverage



Source: Calculated by ERS from March CPS data.

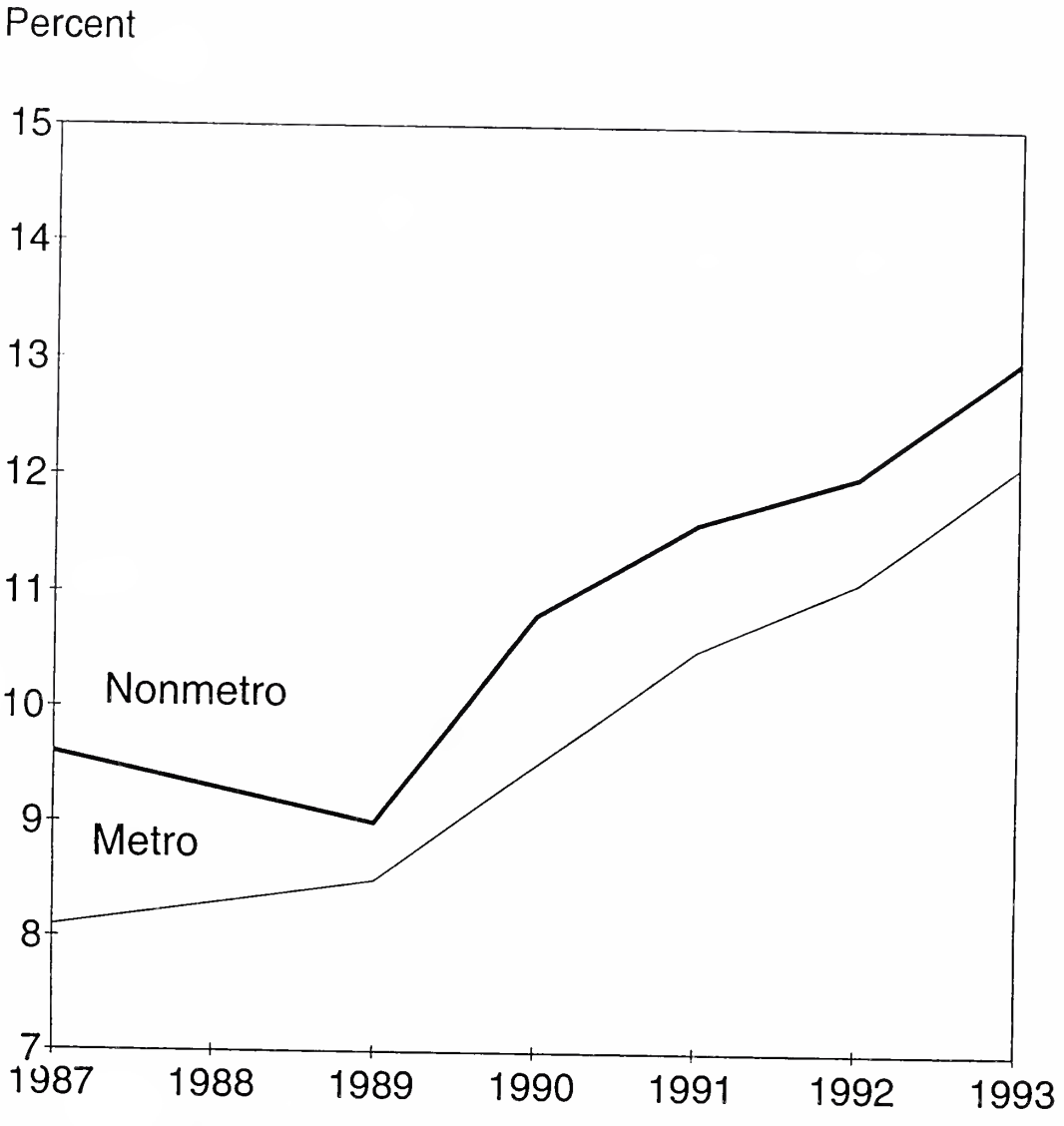
Figure 4: Areas Where Medicare Provided 45 Percent or More of Community Hospital Net Patient Revenue, 1993



Source: Calculated by ERS from 1993 Annual Survey of Hospitals data. Counties have been combined into areas containing at least 3 hospitals.

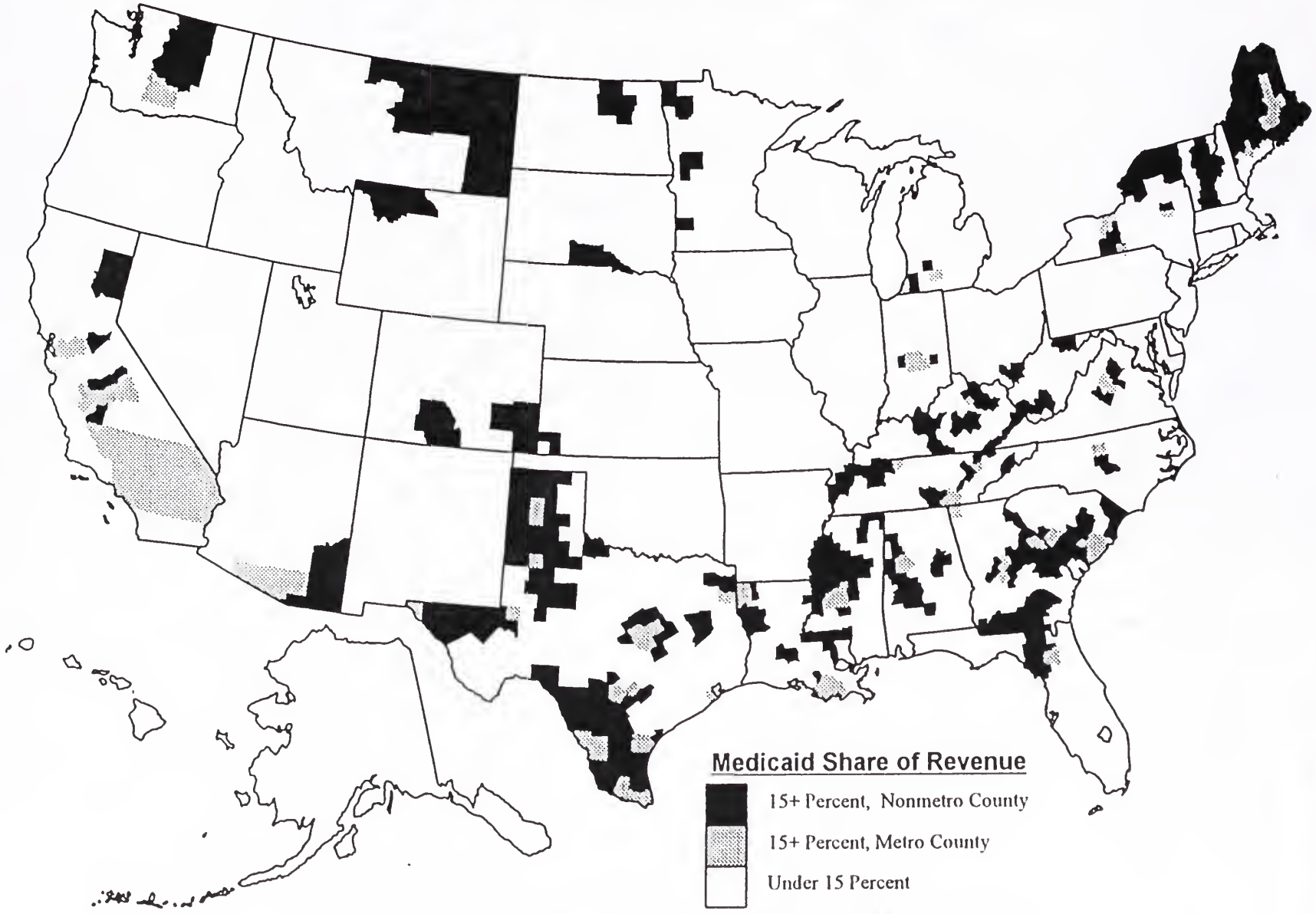
Figure 5.

Persons with Medicaid Coverage



Source: Calculated by ERS from March CPS data.

Figure 6: Areas Where Medicaid Provided 15 Percent or More of Community Hospital Net Patient Revenue, 1993



Source: Calculated by ERS from 1993 Annual Survey of Hospitals data. Counties have been combined into areas containing at least 3 hospitals.